

CLEAN VERSION OF PENDING CLAIMS

9. A cup assembly having an open end, comprising:

Sub G27 (a) a dual wall cup assembly comprising: (i) an outer cup made of a thermoplastic material, with a side wall, a top and an end, the end is closed and sealed by a bottom wall and the top is open; (ii) an inner cup made of a thermoplastic material, with a side wall, a top and an end, the end is closed and sealed by a bottom wall; and (iii) the inner cup is configured to be receivable within the outer cup to create a sealed gap between the side walls of an inner surface of the outer cup and an outer surface of the inner cup;

1 (b) the cup assembly is a child spill-proof cup that has a removably mounting cap thereon, the cap has a spout that projects from a side upwardly, the spout is formed integrally with the cap and includes a front and rear walls that converge to an outwardly protruding tip of the spout; and

β (c) the dual wall assembly provides sufficient insulation ability so that the cup assembly takes at least about 100 minutes to reach 70°F when tested by cup insulation test method .

10. A cup assembly having an open end, comprising:

(a) a dual wall cup assembly comprising: (i) an outer cup made of a thermoplastic material, with a side wall, a top and an end, the end is closed and sealed by a bottom wall and the top is open; (ii) an inner cup, made of a thermoplastic material, with a side wall, a top and an end, the end is closed and sealed by a bottom wall; and (iii) the inner cup is configured to be receivable within the outer cup to create a sealed gap between the side walls of an inner surface of the outer cup and an outer surface of the inner cup;

(b) the cup assembly is a child spill-proof cup that has a removably mounting cap

thereon, the cap has a spout that projects from a side upwardly, the spout is formed integrally with the cap and includes a front and rear walls that converge to an outwardly protruding tip of the spout; and

¹
B (c) the dual wall assembly provides sufficient insulation ability so that the cup assembly takes at least about twice the time to reach 70°F compared to a comparable single wall cup, which is made of the same thermoplastic material of the inner cup and substantially the same size and shape of the inner cap, when tested by cup insulation test method.

12. A cap assembly having an open end, comprising:

²
B (a) a dual wall cup assembly comprising: (i) an outer cup, made of a thermoplastic material, with a side wall, a top and an end, the end is closed and sealed by a bottom wall and the top is open; (ii) an inner cup, made of a thermoplastic material, with a side wall, a top and an end, the end is closed and sealed by a bottom wall; and (iii) the inner cup is configured to be receivable within the outer cup to create a sealed gap between the side walls of an inner surface of the outer cup and an outer surface of the inner cup;

(b) the cup assembly is a child spill-proof cup that has a removably mounting cap thereon, the cap has a spout that projects from a side upwardly, the spout is formed integrally with the cap and includes a front and rear walls that converge to an outwardly protruding tip of the spout; and

(c) the dual wall assembly provides sufficient insulation ability so that the cup assembly takes at least about twice the time to reach 70°F compared to a comparable single wall cup, which is made of the same thermoplastic material of the inner cup and

substantially the same size and shape of the inner cap, when tested by cup insulation test method.

(d) the dual wall assembly provides sufficient impact strength so that the cup assembly does not crack or break when tested by drop test method.

13. A cup assembly having an open end, comprising:

B²
(a) a dual wall cup assembly comprising: (i) an outer cup, made of a thermoplastic material, with a side wall, a top and an end, the end is closed and sealed by bottom wall and the top is open; (ii) an inner cup, made of a thermoplastic material, with a side wall, a top and an end, the end is closed and sealed by a bottom wall; (iii) the side wall thickness of the inner and outer cups are about 0.05 to about 0.06 inches; and (iv) the inner cup is configured to be receivable within the outer cup to create a sealed gap between the side walls of an inner surface of the outer cup and an outer surface of the inner cup wherein the gap is about 0.04 to about 0.08 inches;

(b) the cup assembly is a child spill-proof cup that has a removably mounting cap thereon, the cap has a spout that projects from a side upwardly, the spout is formed integrally with the cap and includes a front and rear walls that converge to an outwardly protruding tip of the spout; and

(c) the dual wall assembly provides sufficient insulation ability so that the cup assembly takes at least about 100 minutes to reach 70°F when tested by cup insulation test method.

14. A cup assembly having an open end, comprising:

(a) a dual wall cup assembly comprising: (i) an outer cup, [consisting] made of a thermoplastic material, with a side wall, a top and an end, the end is closed and sealed by

a bottom wall and the top is open; (ii) an inner cup, made of a thermoplastic material, with a side wall, a top and an end, the end is closed and sealed by a bottom wall; (iii) the side wall thickness of the inner and outer cups are about 0.03 to about 0.08 inches; and (iv) the inner cup is configured to be receivable within the outer cup to create a sealed gap between the side walls of an inner surface of the outer cup and an outer surface of the inner cup and between the bottom walls wherein the sealed gap is about 0.04 to about 0.1 inches;

(b) the cup assembly is a child spill-proof cup that has a removably mounting cap thereon, the cap has a spout that projects from a side upwardly, the spout is formed integrally with the cap and includes a front and rear walls that converge to an outwardly protruding tip of the spout; and

(c) the dual wall assembly provides sufficient insulation ability so that the cup assembly takes at least about 100 minutes to reach 70°F when tested by cup insulation test method.

15. A cup assembly having an open end, comprising:

(a) a dual wall cup assembly comprising: (i) an outer cup, made of a thermoplastic material, with a side wall, a top and an end, the end is closed and sealed by a bottom wall and the top is open; (ii) an inner cup, made of a thermoplastic material, with a side wall, a top and an end, the end is closed and sealed by bottom wall; (iii) a curve region at a bottom outside edge of the outer cup having a thickness greater than the wall thickness of the outer cup and a notch in a curve region at a bottom inside edge of the outer cup; and (iv) the inner cup is configured to be receivable within the outer cup to create a sealed gap between the side walls of an inner surface of the outer cup and an

outer surface of the inner cup;

1b (b) the cup assembly is a child spill-proof cup that has a removably mounting cap thereon, the cap has a spout that projects from a side upwardly, the spout is formed integrally with the cap and includes a front and rear walls that converge to an outwardly protruding tip of the spout; and

(c) the dual wall assembly provides sufficient insulation ability so that the cup assembly takes at least about 100 minutes to reach 70°F when tested by cup insulation test method.

17. A cup assembly having an open end, comprising:

3
B (a) a dual wall cup assembly comprising: (i) an outer cup, made of a thermoplastic material, with a side wall, a top and an end, the end is closed and sealed by a bottom wall and the top is open; (ii) an inner cup made of a thermoplastic material, with a side wall, a top and an end, the end is closed and sealed by a bottom wall; (iii) the side wall thickness of the inner and outer cups are about 0.03 to about 0.08 inches (iv) a curve region at a bottom outside edge of the outer cup having a thickness greater than the wall thickness of the outer cup and a notch in a curve region at a bottom inside edge of the outer cup; and (v) the inner cup is configured to be receivable within the outer cup to create a sealed gap between the side walls of an inner surface of the outer cup and an outer surface of the inner cup wherein the sealed gap is about 0.04 to about 0.1 inches; and

(b) the cup assembly is a child spill-proof cup that a removably mounting cap thereon, the cap has a spout that projects from a side upwardly, the spout is formed integrally with the cap and includes a front and rear walls that converge to an outwardly protruding tip of the spout; and

³
B (c) the dual wall assembly provides sufficient insulation ability so that the cup assembly takes at least about 100 minutes to reach 70°F when tested by cup insulation test method.

⁴
B 29. The cup assembly of claim 9 having a valve located adjacent to or incorporated into the spout wherein the valve substantially prevents a liquid from leaking out of the spout.

30. The cup assembly of claim 10 having a valve located adjacent to or incorporated into the spout wherein the valve substantially prevents a liquid from leaking out of the spout.

32. The cup assembly of claim 12 having a valve located adjacent to or incorporated into the spout wherein the valve substantially prevents a liquid from leaking out of the spout.

⁵
B 33. The cup assembly of claim 13 having a valve located adjacent to or incorporated into the spout wherein the valve substantially prevents a liquid from leaking out of the spout.

34. The cup assembly of claim 14 having a valve located adjacent to or incorporated into the spout wherein the valve substantially prevents a liquid from leaking out of the spout.

35. The cup assembly of claim 15 having a valve located adjacent to or incorporated into the spout wherein the valve substantially prevents a liquid from leaking out of the spout.

⁶
B 37. The cup assembly of claim 17 having a valve located adjacent to or incorporated into the spout wherein the valve substantially prevents a liquid from leaking

B⁶
out of the spout.

B⁷
40. The cup assembly of claim 29 wherein the inner cup is sufficiently sized to hold about 6 to about 9 ounces of liquid.

41. The cup assembly of claim 30 wherein the inner cup is sufficiently sized to hold about 6 to about 9 ounces of liquid.

43. The cup assembly of claim 32 wherein the inner cup is sufficiently sized to hold about 6 to about 9 ounces of liquid.

B⁸
44. The cup assembly of claim 33 wherein the inner cup is sufficiently sized to hold about 6 to about 9 ounces of liquid.

45. The cup assembly of claim 34 wherein the inner cup is sufficiently sized to hold about 6 to about 9 ounces of liquid.

46. The cup assembly of claim 35 wherein the inner cup is sufficiently sized to hold about 6 to about 9 ounces of liquid.

B⁹
48. The cup assembly of claim 37 wherein the inner cup is sufficiently sized to hold about 6 to about 9 ounces of liquid.

B¹⁰
53. The cup assembly of claim 40 wherein the cup assembly is formed from a plastic selected from the group consisting of polypropylene, polyethylene and polyester.

54. The cup assembly of claim 41 wherein the cup assembly is formed from a plastic selected from the group consisting of polypropylene, polyethylene and polyester.

B¹¹
56. The cup assembly of claim 43 wherein the cup assembly is formed from a plastic selected from the group consisting of polypropylene, polyethylene and polyester.

57. The cup assembly of claim 44 wherein the cup assembly is formed from a plastic selected from the group consisting of polypropylene, polyethylene and polyester.

B¹¹

58. The cup assembly of claim 45 wherein the cup assembly is formed from a plastic selected from the group consisting of polypropylene, polyethylene and polyester.

59. The cup assembly of claim 46 wherein the cup assembly is formed from a plastic selected from the group consisting of polypropylene, polyethylene and polyester.

B¹²

61. The cup assembly of claim 48 wherein the cup assembly is formed from a plastic selected from the group consisting of polypropylene, polyethylene and polyester.

B¹³

100. The cap assembly of claim 9 wherein the sealed gap consists of an insulation material selected from the group consisting of foam, blowing agents, styrofoam and cardboard.

101. The cap assembly of claim 10 wherein the sealed gap consists of an insulation material selected from the group consisting of foam, blowing agents, styrofoam and cardboard.

102. The cap assembly of claim 12 wherein the sealed gap consists of an insulation material selected from the group consisting of foam, blowing agents, styrofoam and cardboard.

103. The cap assembly of claim 13 wherein the sealed gap consists of an insulation material selected from the group consisting of foam, blowing agents, styrofoam and cardboard.

104. The cap assembly of claim 14 wherein the sealed gap consists of an insulation material selected from the group consisting of foam, blowing agents, styrofoam and cardboard.

105. The cap assembly of claim 9 wherein air is in the sealed gap.

106. The cap assembly of claim 10 wherein air is in the sealed gap.

1313

107. The cap assembly of claim 12 wherein air is in the sealed gap.
 108. The cap assembly of claim 13 wherein air is in the sealed gap.
 109. The cap assembly of claim 14 wherein air is in the sealed gap.
-